

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
2 March 2006 (02.03.2006)

PCT

(10) International Publication Number  
WO 2006/022061 A1(51) International Patent Classification<sup>7</sup>: B60L 3/04, B60R 16/02

(21) International Application Number: PCT/JP2005/010106

(22) International Filing Date: 26 May 2005 (26.05.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 2004-248800 27 August 2004 (27.08.2004) JP

(71) Applicant (for all designated States except US): TOYOTA JIDOSHA KABUSHIKI KAISHA [JP/JP]; 1, Toyota-cho, Toyota-shi, Aichi, 4718571 (JP).

(72) Inventor; and

(75) Inventor/Applicant (for US only): UCHIDA, Kenji [JP/JP]; c/o TOYOTA JIDOSHA KABUSHIKI KAISHA, 1, Toyota-cho, Toyota-shi, Aichi, 4718571 (JP).

(74) Agents: FUKAMI, Hisao et al.; Fukami Patent Office, Mitsui Sumitomo Bank, Minamimorimachi Bldg., 1-29, Minamimorimachi 2-chome, Kita-ku, Osaka-shi, Osaka, 5300054 (JP).

(54) Title: MOTOR VEHICLE CAPABLE OF PREVENTING MALFUNCTION AND INTERRUPTING HIGH-VOLTAGE SYSTEM WHEN ACCIDENT OCCURS

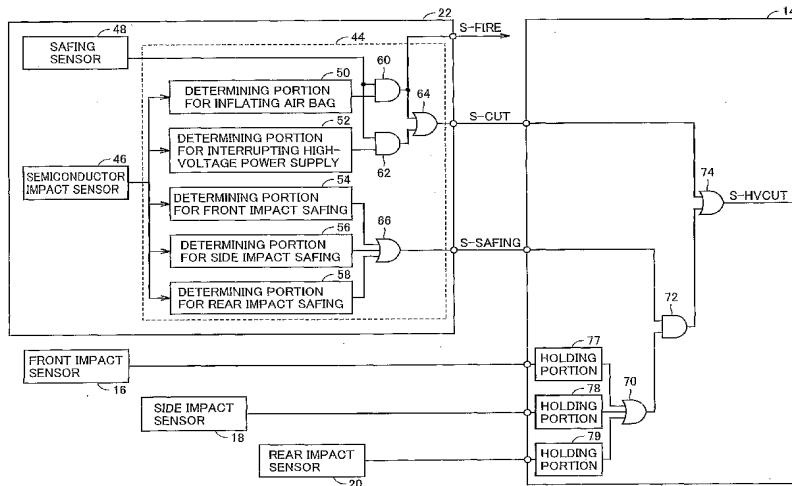
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(57) **Abstract:** An output of a semiconductor impact sensor (46) contained in an air bag ECU (22) is used to make determination in light of a criterion for interrupting a high-voltage power supply, which is different from a criterion for inflating an air bag so that the semiconductor impact sensor forms a redundant system along with a conventional safing sensor to prevent malfunction. Furthermore, an output of the semiconductor impact sensor contained in the air bag ECU is used to make determination for safing and output a safing signal thereby, so that a redundant system can be formed for a front impact sensor (16), a side impact sensor (18), and a rear impact sensor (20). Accordingly, malfunction can be prevented when tampering such as a strike with a hammer occurs.

WO 2006/022061 A1